DRAFT

FY 2000 - 2005 STRATEGIC PLAN

August 2, 1999

OVERVIEW

This is a time of fundamental change for the NRC. To accomplish change, the NRC is continuing to evaluate its role and to further implement a disciplined, integrated Planning, Budgeting, and Performance Management (PBPM) process. Currently, the NRC is revising its strategic plan to focus on outcomes and to serve as the basis for the agency to effectively plan, implement, and monitor work . The revised strategic plan will provide a valuable tool to use in making informed, value-added decisions in planning and in operations - to manage to performance. The revision will also provide a tool for communicating to agency staff how their work relates and contributes to the accomplishment of the agency's goals.

In the Fall of 1997 the agency undertook an effort to review and revise its strategic plan to better align and link the goals and strategies and to improve the logic and functionality of the strategic plan. The revision, however, did not fully consider the issues raised during the NRC's July 30, 1998, hearing before the Senate Subcommittee on Clean Air, Wetlands, Private Property, and Nuclear Safety; the July 17, 1998, Commission meeting with stakeholders; the Chairman's August 7, 1998, tasking memorandum; or the progress achieved to make NRC planning and budgeting more outcome-oriented. Since that time, the agency has begun an internal review to address these issues.

The agency is proposing a broader context for success in its regulatory oversight responsibilities. In addition to its safety mission, the agency recognizes that to be a successful regulator, agency decisions must be based on their contributions, first and foremost to public health and safety, and also in consideration of the impact of those decisions on the public it protects, the industry it regulates, and on effective and efficient internal operations. Inherent in this shift to a broader context of regulation, i.e., our new regulatory paradigm, the NRC will continue to progress from a primarily output-based environment to an outcome-based environment where the agency and its programs and operations are managed to performance goals.

The attached July 30, 1999, draft of the strategic plan reflects revisions that focus on the Nuclear Reactor Safety arena and reflect the progress to date. Updates to this plan reflect changes in Commission policy over the past year, additional stakeholder input, as well as the development of new performance goals and measures. Also included in this package are edits to the front end sections that describe the Agency's mission, strategic goals, management goals, and strategic arenas. The Nuclear Reactor Safety chapter reflects the new focus on four performance goals and the key strategies to be used to achieve these goals. Once completed, this chapter will be used as a model to revise and finalize the other program arena chapters.

This draft of the strategic plan is intended to demonstrate how the paradigm shift that has occurred within the NRC over the past 18 months will become an integral part of NRC's future planning, budgeting, and performance management. This draft has progressed to a point that further improvement will be enhanced by stakeholder input. A schedule to facilitate dialogue among the Commission staff, stakeholders, and Congress is provided below:

Revisions to the Nuclear Reactor Safety (NRS) Chapter of the Strategic Plan

Late July:	Issue draft NRS chapter to stakeholders for comment
August 10:	Stakeholder Workshop on NRS chapter
Early September:	Revised NRS chapter to Commission
Late September:	Senate Oversight hearing

In addition to participating in the workshop, stakeholders may submit written comments on the draft of the strategic plan to the NRC. Comments are requested by August 27, 1999. This draft strategic plan, as well as the ability to provide comments electronically, is available on the NRC web site at http://www.nrc.gov/NRC/COMMISSION/INITIATIVES/1999/index.html. Comments may also be provided in writing at the following address:

U.S. Nuclear Regulatory Commission
ATTN: Debra J. Corley
Mail Stop O-16E15
Washington, D.C. 20555-0001

The NRC is particularly interested in stakeholder comments on the four performance goals and their associated measures and strategies. Additionally, the draft specifically identifies a number of performance measures for which stakeholder input will be especially useful.

The remaining arena chapters (Nuclear Materials Safety, Nuclear Waste Safety, International Nuclear Safety Support) will be revised over the next several months.

The NRC is committed to these changes and its transition to a performance-based organization, and to working with various stakeholders to facilitate improvements to the NRC regulatory framework. Ultimately, the revised strategic plan will define success in bringing change to the regulatory environment and will ensure the highest levels of regulatory performance in the future.

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DRAFT MESSAGE FROM THE CHAIRMAN

The message from the Chairman will be provided with the final Strategic Plan.

OUR MISSION

The Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended, establish the basic regulatory mission of the Nuclear Regulatory Commission (NRC).

> *The NRC's mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.*

OUR STRATEGIC GOALS

The NRC has developed goals consistent with its mission. These strategic goals are supported by performance goals, which represent outcomes the NRC plans to achieve over the period covered by the strategic plan (FY 2000 - FY 2005).

The NRC will conduct an efficient regulatory program that allows the Nation to use nuclear materials safely for civilian[1] purposes and in a manner that protects the environment by working to achieve the following strategic goals:

- Prevent radiation-related[2] deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors (Nuclear Reactor Safety).

- Prevent radiation-related deaths and illnesses, protect the environment and safeguard special nuclear material and facilities in the civilian use of source, by product, and special nuclear materials (Nuclear Materials Safety).

- Prevent adverse impacts to the current and future public health and safety and the environment, as a result of uranium recovery, facility decommissioning, clean-up of contaminated sites, and disposal of radioactive wastes (Nuclear Waste Safety).

- Support U.S. national interests in the safe and secure use of nuclear materials and in nuclear non-proliferation (International Nuclear Safety Support).

The safe and secure use of nuclear materials for civilian purposes is the responsibility of NRC licensees and Agreement State licensees, and the regulatory oversight of licensees is the responsibility of the NRC and the Agreement States. Thus, achieving these strategic goals requires the collective efforts of the NRC, the Agreement States, and licensees.

[1] As used in this strategic plan, "civilian" usage or activities refer to those commercial and other uses of nuclear materials and facilities, including certain military activities (such as at hospitals and high-level waste disposal), required by the Atomic Energy Act to be licensed and otherwise regulated by the NRC.

[2] The term "radiation-related" as used in this document includes other hazards associated with the production and use of radioactive materials such as potential chemical hazards related to fuel processing.

OUR MANAGEMENT GOALS

The NRC has developed six management goals which describe how we will manage our mission programs and related support functions to achieve our goals. The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of our regulatory activities.[3] Building and maintaining public confidence is critical to carrying out our mission. To be an effective steward of nuclear safety, our actions must be such that the public, those we regulate, and other stakeholders have respect for and confidence in the NRC. These overarching management goals are:

- **S** Achieve excellence by effectively and efficiently carrying out our regulatory and support functions.
- **S** Impose only that regulatory burden which is necessary.
- **S** Foster public confidence by providing the public, those we regulate, and other stakeholders in the national and international community with clear and accurate information about, and a meaningful role in, our regulatory program.
- **S** Employ innovative and sound business practices.
- **S** Sustain a high-performing, diverse workforce.[4]
- **S** Apply information technology to streamline processes, improve information delivery, and support scientific computing and information needs.

(As the strategic direction of the other mission-related arenas is developed, we will consider whether specific agency -wide measures for achieving these management goals are necessary and what they should be. Consideration will be given to the integration and application of the management goals, and the value of arena-specific measures, agency-wide measures, or a combination of measures.)

[3] See the strategic plan Appendix for the NRC's "Principles of Good Regulation."

[4] Sustaining a high-performing, diverse workforce will be discussed as an overarching management goal in the "Management Goals and Strategies" section of the strategic plan to be developed.

OUR STRATEGIC ARENAS

The NRC has organized the strategic goals, performance goals and strategies for achieving our mission into the following four strategic arenas. For the Nuclear Reactors, Nuclear Materials, and Nuclear Waste Safety strategic arenas the term “safety” broadly encompasses our responsibilities to protect the public health and safety, to promote the common defense and security, and to protect the environment.

(1) Nuclear Reactor Safety

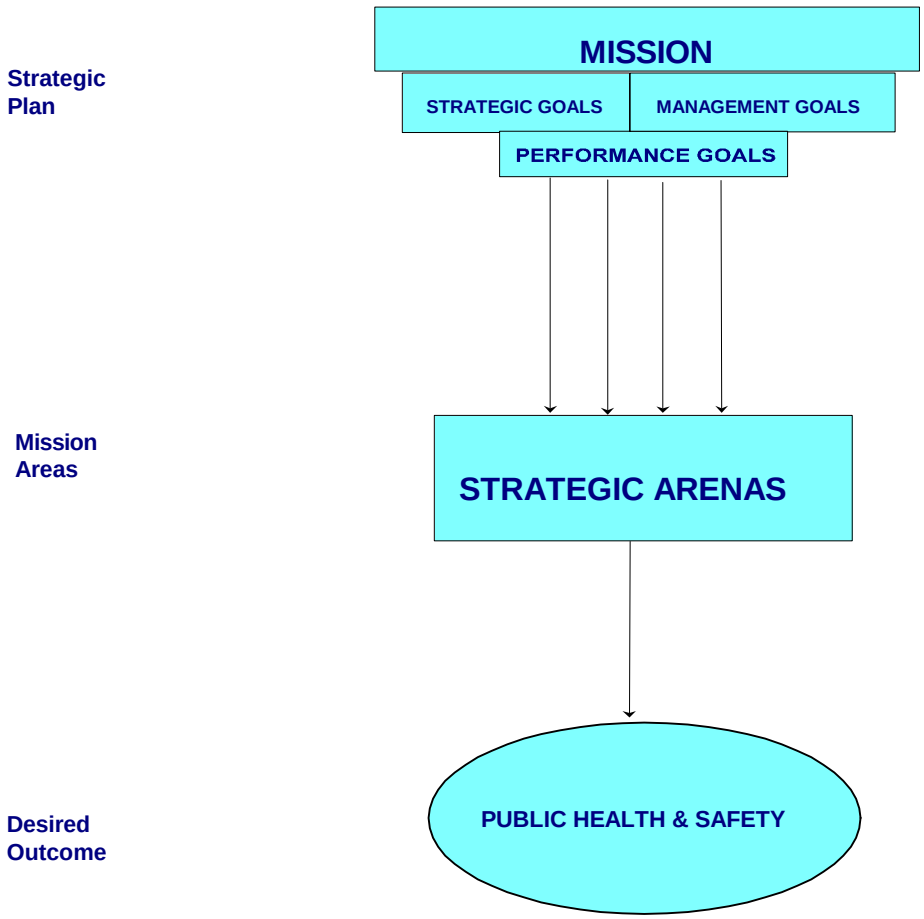
(2) Nuclear Materials Safety

(3) Nuclear Waste Safety

(4) International Nuclear Safety Support

The following illustrates our strategic planning model.

OUR STRATEGIC PLANNING MODEL



The next four strategic arena chapters are organized to (1) provide a brief introduction; (2) state the applicable strategic goal that relates to the arena and the strategic goal measures that indicate whether NRC is achieving its strategic goal; (3) discuss the regulatory paradigm; and (4) discuss the performance goals for measuring success in achieving the applicable strategic and management goals, the strategies for accomplishing the performance goal, and the performance goal measures which indicate whether NRC is achieving the performance goals. The performance goals are the measurable, outcome-oriented results that indicate whether the NRC is achieving its strategic and management goals and, as such, links the multi-year strategic plan to the annual performance plan and performance report consistent with the requirements of the Government Performance and Results Act. We will include these performance goals and their associated performance measures in the performance plan. The arena chapters reflect the paradigm shift and describe how the goals, measures, and strategies link to agency programs and activities (reflected in the schematic provided in the Appendix).

While we have not identified a need for any significant legislative changes to achieve the goals and strategies included in this strategic plan, the NRC is seeking legislation that would eliminate the overlap in the standard-setting authority of the NRC and the Environmental Protection Agency (EPA) with regard to Atomic Energy Act sites and materials by recognizing the NRC's and Agreement States' standards in these areas.

Verification and validation of data generated by NRC as well as by the industry and other external sources will be a major focus as performance measures are established. Establishing the necessary systems, data collection policies and procedures, and substantive verification and validation procedures will ensure that the performance we report is supported by accurate, comprehensive, and reliable internal and external data. To the extent that the agency depends on the industry for performance data, it is necessary to verify and validate data on a sound sampling and auditing basis. Our efforts will place particular emphasis on data generated by entities external to the agency that will be used to support the achievement of agency goals. As recommendations and decisions are made on the appropriate performance measures, definitive verification and validation procedures will be defined and implemented for such data.

We anticipate no major unique resource requirements; however, this strategic plan assumes adequate resources during the strategic planning period to achieve the performance goals. Our annual integrated performance plan/budget will detail the specific goals, measures, and resources needed to successfully direct our strategic direction.

APPENDIX

The Appendix contains the NRC's Safety Philosophy and the Principles of Good Regulation. The NRC's safety philosophy was endorsed by the Commission in 1986 and the Principles of Good Regulation were established in 1990. The philosophy and principles reflected in these documents continue to support the agency's approach to regulation to accomplish our mission. The Appendix also contains several sections that address:

- the principal components of the program chapters of the strategic plan (schematic)
- the strategic plan relationship to other NRC planning documents
- a crosscutting functions section that address areas of mutual interest with other Federal agencies where there is a common purpose or objective, the relationship of those efforts to NRC programs and strategic arenas, and a brief discussion of each area
- data verification and validation
- responsiveness to audit reports and investigative findings
- Congressional and stakeholder consultations
- the process to update the strategic plan

(Items 2-7 will be provided with future updates of the strategic plan.)

NUCLEAR REACTOR SAFETY

The Nuclear Reactor Safety arena encompasses all NRC efforts to ensure that civilian nuclear power reactor facilities, as well as non-power reactors, are operating in a manner that adequately protects public health and safety and the environment, and provides safeguards of special nuclear materials used in reactors. The following table reflects the agency's regulatory responsibilities and statutory authority to accomplish this mission:

Nuclear Reactor Safety Statutory Authority	
Protection of public health and safety	- Atomic Energy Act of 1954, as amended - Energy Reorganization Act of 1974, as amended
Protection of the environment	- Atomic Energy Act of 1954, as amended - National Environmental Policy Act (NEPA) and other environmental legislation - Case law interpreting NEPA
Civilian reactor safeguards	- Atomic Energy Act of 1954, as amended - Energy Reorganization Act of 1974, as amended - Nuclear Non-Proliferation Act of 1978

STRATEGIC GOAL: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

This strategic goal represents the principal focus of the Nuclear Reactor Safety arena. The goal is to achieve our statutory mission to ensure that the nation's operating civilian nuclear reactors pose no undue risk to public health and safety and protects the environment. The collective efforts of the NRC and the nuclear industry are needed to maintain safety. NRC licensees[5] have the responsibility to safely design, construct, and operate civilian nuclear reactor facilities. Regulatory oversight of licensee safety is the responsibility of the NRC. Thus, safe performance reflects the results of the collective efforts of the NRC and the nuclear industry. The following measures will indicate whether this strategic goal is being achieved:

STRATEGIC GOAL MEASURES

1. Zero nuclear reactor accidents.[6]
2. Zero deaths resulting from radiation or radioactivity releases from nuclear reactors.[7]
3. Zero significant radiation exposures resulting from nuclear reactors.[8]
4. Zero radiological sabotages or theft or diversion of special nuclear materials at nuclear reactors.
5. Zero offsite releases of radioactive material from nuclear reactors that have the potential to cause an adverse impact on the environment.[9]

The first three measures indicate whether we are achieving the strategic goal of preventing radiation-related deaths or illnesses. We will also measure whether radiological sabotages or theft or diversion have occurred since such acts could result in core damage, radioactive releases, and significant radiation exposures. Lastly, we will measure how well we protected the environment by whether offsite releases have occurred that could have an adverse impact on the environment.

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[5] "Licensees" as used in this strategic plan include persons required to be licensed (as defined in section 11s of the Atomic Energy Act) as well as, where appropriate, applicants for licenses; certificate holders and applicants for certificates; contractors (including suppliers and consultants), subcontractors, and vendors of licensees or certificate holders; and all persons subject to the NRC's jurisdiction.

[6] "Nuclear reactor accidents" is defined in the NRC Severe Accident Policy Statement (50 Federal Register 32138, August 8, 1985) as those accidents which result in substantial damage to the reactor core, whether or not serious offsite consequences occur.

[7] This measure addresses actual deaths resulting from acute radiation exposure.

[8] "Significant radiation exposures" are those exposures that meet the NRC's criteria for reporting abnormal occurrences to Congress.

[9] For measuring this goal, releases of radioactive material that have the potential to cause "adverse impact" are those that exceed the limits for reporting to the NRC immediately or within 24 hours of discovery, as provided by 10 CFR 20.2202.

NUCLEAR REACTOR SAFETY PERFORMANCE GOALS

NRC's NEW REGULATORY PARADIGM

The NRC recognizes its responsibility to provide regulatory oversight that supports safe, effective and efficient operation of nuclear reactors. The protection of public health and safety remains paramount among our goals and will drive our decisions. However, the new paradigm provides greater emphasis on other key considerations, including the impact of our decisions on the public's trust in our process, the industry we regulate, and our own effectiveness and efficiency. Inherent in this new regulatory paradigm is the establishment of performance goals. Then agency work (programs and activities) is planned, managed, monitored, and assessed based on the relative contribution of the work to the achievement of these performance goals, with public health and safety as the primary consideration. The following performance goals support the Nuclear Reactor Safety arena strategic goal:

- Maintain safety;
- Increase public confidence;
- Reduce unnecessary regulatory burden; and
- Make NRC activities and decisions more effective, efficient and realistic.

Collectively, these outcome-based goals are the key contributors to the strategic goal. The performance goals and their associated performance measures reflect the new regulatory paradigm where the agency will move to more outcome-based goals and where the agency will manage to performance. Agency programs and activities will be evaluated to determine their contribution toward the achievement of the performance goals. This evaluation will form the basis to identify whether existing programs are successfully achieving the goals or whether new initiatives are needed. Resources will be directly allocated to the work that is necessary to achieve the performance goals. The strategic plan will be used as one of the primary tools to communicate and institutionalize this fundamental change in the agency's regulatory paradigm.
The following sections discuss each specific performance goal, discuss the strategies to effectively achieve the goal, identify specific measures to determine if the performance goal is being achieved, and then discuss external and other factors that affect the agency's ability to achieve its performance goals.

The identification and discussion of external factors and their impact on our ability to achieve our goals will be incorporated into the arena as recommendations and decisions are made on the appropriate performance measures.

In areas where actual performance does not meet the projected performance measure, the performance report will discuss any significant variances and provide narrative as to the evaluation of the performance and the applicability of the particular measure, and what actions will be taken.

PERFORMANCE GOAL 1: Maintain safety.

This performance goal supports the strategic goal of preventing radiation-related deaths and illnesses, promoting common defense and security, and protecting the environment in the use of civilian nuclear reactors.

Safety performance of the nuclear power industry has improved substantially over the past ten years and nuclear reactors, collectively, are operating above acceptable safety levels consistent with the agency's Safety Goal Policy (51 FR 28044). NRC believes this level should be maintained, and it is not necessary to take overt action to increase safety across the board. If significant safety improvements are identified, additional requirements should only be imposed consistent with the Commission's Backfit Rule (10 CFR 50.109).

Because of the improved level of safety performance achieved by the nuclear power industry in recent years, it may be acceptable to allow small risk increases when there is reasonable assurance that sufficient defense-in-depth and safety margins are present. Small risk changes that reduce unnecessary burden will allow more efficient use of licensee and NRC resources as well as bring into focus those areas that are more critical to the safety of the public and environment. The NRC will pursue risk-informed and performance-based approaches, where appropriate, and focus our attention on those areas of highest safety priority.

NRC licensees will continue to have the primary role in maintaining safety and are expected to identify design and operational aspects of their plants that should be enhanced to maintain acceptable safety levels.

To remain operating, the safety performance of nuclear power plants must be above acceptable minimum levels. In accordance with our oversight process, which includes licensing, inspection, assessment, and enforcement, NRC will take action to improve the safety performance of plants identified as falling below acceptable levels.

Maintaining safety is the preeminent performance goal that supercedes all other performance goals. As a part of maintaining safety, we will evaluate and take action on the safety implications of operational events, experience, and new information from research; revise NRC requirements; issue generic communications; and, identify and resolve generic safety issues.

STRATEGIES FOR ACHIEVING SUCCESS:

We will maintain safety by using the following key strategies:

- *We will sharpen our focus on safety by transitioning to a revised NRC reactor oversight program for our inspection, assessment, and enforcement activities.*

  We will increase the focus of inspections on those activities with the greatest potential impact on safety through the new reactor oversight program. Inspection results will routinely be evaluated to determine the risk importance of the findings. These inspection results will be used along with pre-defined performance indicators, (e.g., safety system unavailability) to provide an assessment of a licensee's safety

performance. This assessment process is expected to be more objective, predictable, and risk-informed than the method previously in place. The enforcement program is also being changed to be better linked to the safety significance of inspection findings and to emphasize the importance of the licensee's corrective action program.

- *We will ensure that changes to operating licenses (i.e., license amendments) and exemptions to regulations maintain safety. We will be prepared to authorize the siting, design, construction, and operation of nuclear reactors.*

  We will issue license amendments for nuclear reactors only after operational safety, safeguards, emergency planning, environmental, and financial assurance requirements have been adequately addressed. We will give priority to those licensing actions and exemptions that provide the greatest safety benefit to the public. We will encourage applicants, vendors, and others to inform the NRC at the earliest opportunity of planned future reactor activities so that we will be prepared to respond.

- *We will maintain the capability to respond to operational events involving potential radiological consequences.*

  We will maintain and operate a continuously staffed Operations Center, periodically conduct exercises to ensure response organizations are proficient, and support trained experienced staff prepared to respond to operational events according to their safety significance. We will also maintain incident investigation capabilities. These activities help to maintain safety by providing timely, accurate, and complete assessments of recommendations for actions to protect the public and coordinating with other federal agencies, state and local governments and the licensee.

- W*e will identify, evaluate, and resolve new safety issues as they arise and will ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.*

  We will conduct research to improve our knowledge in areas where uncertainties in our knowledge exist and may be significant to risk and where safety margins are not well characterized. For example, we will evaluate potential degradation of plant systems as they age and ensure that data and methods are available to evaluate this degradation and the effectiveness of corrective strategies. We will conduct research to ensure that an adequate independent technical basis as well as related codes and standards exists to review and approve licensee or industry proposals. For complex technical issues, we will develop a better understanding of the existing safety margins to inform our regulatory decisions.

- *We will evaluate operating experience and the results of risk assessments for safety implications.*

  We will evaluate the risk significance of operational events and trends in data in conjunction with risk assessments so that safety vulnerabilities can be identified, prioritized, communicated, and resolved on a timely basis. Operational experience will

also be used by the staff to improve our regulatory activities including licensing, inspection, and risk assessments.

- *We will ensure that safety is maintained as licenses are renewed by ensuring that aging effects will be adequately managed and that the licensing basis related to the present plant design and operation will be maintained.*

  We will authorize license renewal only after we have determined that aging effects have been adequately managed. We will ensure that the licensing basis related to the present plant design and operation will be maintained throughout the period of extended operation. We will perform inspections to support the review of license renewal applications by verifying the acceptability of licensee aging management processes.

- *We will develop and implement risk-informed, and, where appropriate, performance-based regulatory approaches.*

  As part of our agency-wide Probabilistic Risk Assessment Implementation Plan for risk-informing our regulatory processes, we will implement an incremental approach to risk-informing the reactor oversight process and risk-informing the scope of 10CFR Part 50. We will develop risk-informed definitions of "safety-related" and "important-to-safety" plant equipment. We will also assess the technical requirements associated with 10 CFR Part 50 and make changes to ensure that safety is maintained by sustaining our regulatory focus on plant equipment and technical requirements that contribute to nuclear reactor safety. Mindful of the limitations in risk assessment methods, we will improve these methods and tools in areas where there needs to be a better understanding of contribution to plant risk.

PERFORMANCE GOAL MEASURES: To achieve the goal to maintain safety, the NRC has established measures that directly, or through surrogate measures, indicate whether the NRC is achieving its performance goal. These measures establish how far and how fast the agency will move in the direction established by the performance goal and help to determine the need to evaluate and adjust programs and activities to achieve the performance goal. The NRC believes these measures will provide reasonable assurance that the performance goal of maintaining safety will be met.

PERFORMANCE GOAL MEASURES
TO MAINTAIN SAFETY

1. No more than one event per year which is a significant precursor of a nuclear reactor accident.[10]

2. No significant adverse industry trends in Commission's performance indicators. [Placeholder to work with stakeholders to identify indicators to be used]

3. No increase in the number of offsite releases (no more than 3) of radioactive material from nuclear reactors that exceed the limits specified in 10 CFR 20.2203.

4. No substantiated breakdown of physical security that significantly weakens the protection against radiological sabotage or theft or diversion of special nuclear materials in accordance with abnormal occurrence criteria.

5. Environmental considerations are appropriately addressed before regulatory action is taken (e.g. NEPA, Endangered Species Act, other related Federal environmental statutes).

6. In FY 2001, the NRC will conduct a comprehensive evaluation of the effectiveness of the revised reactor oversight program.

7. Stakeholder input requested for measures which portray NRC's sole contribution to safety as opposed to a combined NRC/industry contribution. Consider inspection findings and significance determination process of new Reactor Oversight Program.

Accidents that involve substantial core damage or a release of radionuclides can be minimized by maintaining a low frequency of events that have the potential to lead to a nuclear reactor accident or large early release, as such, we will also measure such precursor events. No significant adverse trends in performance indicators ensures that the nuclear industry as a whole is maintaining safety. The environment is protected by ensuring that environmental impacts have been considered in accordance with NEPA and other environmental laws before regulatory action is taken.

[10] Such events have a 1/1000 (10^{-3}) or greater probability of leading to a reactor accident.

PERFORMANCE GOAL 2: Increase public confidence.

This performance goal supports the strategic goal of preventing radiation-related deaths and illnesses, promoting the common defense and security, and protecting the environment in the use of civilian nuclear reactors. It also supports the management goal of fostering public confidence by providing the public, those we regulate, and other stakeholders in the national and international community with clear and accurate information about, and a meaningful role in, our regulatory program.

Building and maintaining the public trust is critical to carrying out the NRC mission of ensuring adequate protection of public health and safety and the environment in the use of nuclear material. For the NRC to be effective in carrying out this mission, the public must have respect for and confidence in the NRC. Public concern about nuclear safety has at times been high, particularly for the public who live near nuclear facilities. NRC has not consistently provided means that are viewed by the public as acceptable to express their concerns and have them considered, and to explain NRC's role, responsibilities, and actions. This goal reflects NRC's desire to improve in this area.

This performance goal recognizes that NRC must candidly inform the public about nuclear safety incidents and issues, provide means for meaningful input and dialogue and demonstrate through our performance that we are capable and objective regulators. It also recognizes that while the public may not always agree with the NRC actions, public confidence in the NRC is enhanced when the agency consistently carries out its mission in a thorough, disciplined, and timely manner.

STRATEGIES FOR ACHIEVING SUCCESS:

We will use the following key strategies to achieve our performance goal to increase public confidence:

- *We will demonstrate that NRC is a well-managed regulatory agency that meets its goals and commitments.*

  The public's confidence that nuclear power is safe is influenced by the public's perception of NRC as a competent, independent regulator. The NRC will meet its statutory mandate by implementing a Planning, Budgeting, and Performance Management process that provides for public input and visibility to our goals and performance measures. We will manage to that performance and will measure and report on achieving performance goals as they relate to public health and safety and the environment.

- *We will report on the safety of nuclear power facilities.*

  Public confidence is influenced by information about the operation of nuclear facilities. NRC will collect information about the safety performance of nuclear reactors and report that information objectively to the public. Where licensee performance is outside established criteria, the appropriate remedial action will be communicated to the public.

When safety issues are raised, NRC will communicate to the public how these issues are being addressed.

- *We will foster an environment where safety issues can be openly identified without fear of retribution*.

  In addition to maintaining safety, public confidence is enhanced in an environment where safety issues can be raised and addressed without fear of retribution. Examples of this strategy include NRC's response to allegations and safety conscious work environment concerns, and NRC's internal programs for Differing Professional Opinions and Generic Safety Issues. We will conduct a pilot program to solicit feedback from individuals raising safety issues to assess the effectiveness of NRC's handling of allegations.

- *We will respond to the requests, inquiries, and concerns of our stakeholders in a timely, courteous, and professional manner.*

  The American public, elected representatives, licensees, and other stakeholders in the national and international community expect timely, courteous, complete, and accurate responses to requests, inquiries, and concerns. We will address issues candidly and in plain language, consistent with the safety significance and relative priority of the issue. We will take full advantage of the Internet and new technology for information dissemination. We will protect the privacy, as well as the proprietary and classified nature, of information.

- *We will present information in a manner that is readily understandable to all stakeholders to avoid unnecessarily raising stakeholder concerns.*

  Public confidence in the NRC will be enhanced, and we will avoid unnecessarily raising stakeholder concerns if the information is placed in its proper safety context and presented in a manner that is easily understood. Our communications with the public will be designed to foster greater understanding of and confidence in our regulatory program. The information we disseminate will be clear, technically sound, accurate, reliable, objective, timely, and expressed using plain, simple English. All stakeholders should be able to rely on our statements and information.

- *We will make public participation in the regulatory process more accessible.*

  One of the attributes of strong, fair regulation of the nuclear industry involves consistent and timely public involvement. The agency recognizes the public interest and concern in the proper regulation of nuclear activities, and recognizes its responsibility to provide opportunities for meaningful public interaction and involvement. We will consider public views in planning changes and making decisions relating to our practices, rules, and processes through holding open meetings in the vicinity of the nuclear facilities; providing adequate notice of meetings; developing communications plans for major regulatory activities; and, holding workshops. NRC will clearly communicate its role in a

given regulatory activity.

PERFORMANCE MEASURES:

To achieve the performance goal to increase public confidence, the NRC has established measures that directly, or through surrogate measures, indicate whether the NRC is achieving its performance goal. These measures establish how far and how fast the agency will move in the direction established by the performance goal and help to determine the need to evaluate and adjust programs and work to achieve the performance goal. The NRC believes these measures will provide reasonable assurance that the performance goal will be met.

PERFORMANCE GOAL MEASURES
TO INCREASE PUBLIC CONFIDENCE

1. Increase the current level of public confidence (stakeholder input requested on workable approaches to measure public confidence and on appropriate quantitative targets).

2. In February 2000, the NRC will initiate a pilot program to solicit feedback on the NRC's program for handling allegations.

3. In June 2001, the NRC will complete a comprehensive evaluation of the effectiveness of the allegation program using feedback gained through the pilot program.

4. Increase outreach activities with the public in the vicinity of nuclear facilities for significant regulatory issues .

5. Complete 2 public information projects per year.

6. Complete FOIA processing within median time of 30 days.

7. Public correspondence will be responded to in 16 business days (average).

8. For petitions filed under 10 CFR 2.206, a Director's Decisions will be issued within 120 days for cases within NRC's control. (Stakeholder input requested on the need for measures relating to the reform of the 2.206 petition process. Additionally, the staff is preparing to publish Management Directive 8.11 in the federal register for public comment. Broad comments will be requested, but specific questions will also be included, such as, "What are the stakeholders view of issuing the petition in draft to ensure that it is factually accurate and that it addresses the issues raised.)

The first performance measure is intended to establish a baseline for evaluating the results of NRC's initiatives to improve the public's confidence in NRC as an effective regulator. The remaining measures reflect the specific areas where the agency will focus and specific

initiatives that will be implemented. By improving and promoting interactions with the public in these areas, NRC believes it will result in increased public confidence in the NRC.

PERFORMANCE GOAL 3: Reduce unnecessary regulatory burden.

This performance goal supports the strategic goal of preventing radiation-related deaths and illnesses, protecting the common defense and security, and protecting the environment in the use of civilian nuclear reactors. By reducing unnecessary regulatory burden, both NRC and licensee resources become available to more effectively focus on safety issues. In addition, this performance goal supports the management goals of achieving excellence by effectively and efficiently carrying out our regulatory and support functions.

NRC believes there are some areas where the burden of NRC regulations and practices is not commensurate with the safety benefit. NRC rules, regulations, and processes were developed over the past 30 or more years. During this period, an ever increasing body of technical knowledge and operational experience has been accumulated that allows for refinements and enhancements in NRC requirements and programs that can reduce unnecessary regulatory burden, while assuring maintenance of safety. Not all of our requirements and programs have been updated to take into account these advancements, and as such, may not be as efficient and effective as possible.

While regulation, by its nature, is a burden, we will ensure that only the necessary level of burden which is required to maintain safety is imposed on licensees. While our current performance goal is to reduce unnecessary regulatory burden, our long range plans are to eliminate it to the extent feasible and cost effective. Again, we will pursue risk-informed and performance-based approaches, where justified, so we can focus our attention on those areas of highest safety priority. We will make realistic decisions that contain no undue conservatism.

STRATEGIES FOR ACHIEVING SUCCESS:

We will reduce unnecessary regulatory burden by using the following key strategies:

- *We will utilize risk information and performance-based approaches to reduce unnecessary regulatory burden.*

  As part of our agency-wide Probabilistic Risk Assessment Implementation Plan , we will modify or delete regulations that provide little or no safety benefit. We will focus on less prescriptive and more risk-informed and performance-based regulatory approaches to provide licensees with flexibility in meeting regulatory requirements. The scope and priority of changes in our regulatory processes will consider stakeholder initiatives and the cumulative effect on agency and licensee burden reduction.

- *We will improve our licensing programs and processes.*

  We will reduce unnecessary regulatory burden by improving NRC licensing programs and processes to be more timely and effective. For example, this includes a more focused approach for requesting additional information from licensees in support of license amendments, license renewals, and exemptions.

- *We will improve our reactor oversight program by redirecting resources from those areas not important to safety.*

  In recognition that NRC oversight imposes a regulatory burden, we are implementing a revised reactor oversight program. This program focuses NRC inspection resources on licensees with performance problems, reduces regulatory attention on licensees that perform well, evaluate violations of regulations in a predictable and consistent manner that reflects the safety impact of the violations, and provides the nuclear industry and public timely, objective, and understandable assessments of plant performance. NRC involvement in plant shut-downs will only extend to that required to maintain safety.

- *We will actively seek stakeholders input to identify opportunities for reducing unnecessarily burdensome regulatory requirements and clarifying regulatory requirements.*

  We will continue our programs to interact with stakeholders to ensure a mutual understanding of regulatory requirements, including technical and safety issues, and to identify areas where regulatory burden may be reduced while maintaining safety. Opportunities to reduce regulatory burden will also focus on research activities.

PERFORMANCE MEASURES:

To achieve the performance goal to reduce unnecessary regulatory burden, the NRC has established measures that directly, or through surrogate measures, indicate whether the NRC is achieving its performance goal. These measures establish how far and how fast the agency will move in the direction established by the performance goal and help to determine the need to evaluate and adjust programs and work to achieve the performance goal. The NRC believes the achievement of these measures will provide reasonable assurance that the performance goal will be met.

PERFORMANCE GOAL MEASURES
TO REDUCE UNNECESSARY REGULATORY BURDEN

1. Decrease in unnecessary burden per year [specific criteria for measures (e.g., cost to licensees and data quality) to be determined with consideration of input from stakeholders].

2. No shut-downs that result from undocumented NRC influence.

3. No shut-downs that result from failures of NRC processes.

4. By January 2000 the NRC, with stakeholder involvement, will identify and prioritize the areas for the greatest potential for reducing unnecessary regulatory burden.

The first measure is intended to directly measure the reduction in costs to licensees as a result of our efforts to reduce unnecessary regulatory burden. The second measure is intended to

identify any occurrence where NRC staff inappropriately influences a plant shut down by not following documented processes for reaching resolution of safety issues. Additionally, the second, third and fourth measures will, if met, collectively indicate progress toward reducing unnecessary regulatory burden on our licensees.

PERFORMANCE GOAL 4: Make NRC activities and decisions more effective, efficient, and realistic.

This performance goal supports the strategic goal of preventing radiation-related deaths and illnesses, protecting the common defense and security, and protecting the environment in the use of civilian nuclear reactors by maintaining the quality and enhancing the realism of the technical basis for our decisions. It also supports the management goals of achieving excellence, applying information technology to streamline processes and employing innovative business practices by efficiently and effectively carrying out our regulatory and support functions.

The costs of most NRC activities and decisions contributes to our licensees' operating and maintenance costs. As the electric utility industry transitions from a rate-regulated to a market-based business environment, it is incumbent upon NRC to keep its costs low by being effective, efficient and realistic in our activities and decision making while continuing to ensure adequate protection of public health and safety.

Feedback from our stakeholders, our own self assessments, and availability of research suggest that we should capitalize on advances in technology and implement efficiencies to improve our internal processes and improve the quality and bases for decision making. Feedback and our own analyses suggest that we should improve the consistency and predictability of our regulatory decisions by evolving to a more risk-informed and performance-based approach.

Effectiveness means performing the work necessary to support NRC missions and goals in a thorough, disciplined and timely manner. We must periodically challenge the value of NRC programs and activities based on how they contribute to the achievement of goals. Our business processes and regulatory decisions should reflect high standards of quality and be technically sound. Specific challenges in this regard involve (1) risk-informing NRC's regulatory programs, (2) preparing to address evolving technologies and a changing regulatory environment, and (3) improving predictability and consistency of agency decisions .

Efficiency involves performing the agency work in a thorough, disciplined and timely manner. Efficiency can be enhanced by close examination of internal processes to learn from past experiences, reduce costs and become more timely and predictable in delivery of services and decisions.

NRC decisions can be made more realistic by eliminating excessive conservatism and by improving timeliness, consistency, and predictability. Realism is supported by risk information, research results, and operational experience.

STRATEGIES FOR ACHIEVING SUCCESS:

We will make NRC activities and decisions more effective, efficient, and realistic using the following key strategies:

- *We will increase our effectiveness and efficiency by transitioning to an outcome focused organization.*

  We will fully implement a disciplined, integrated planning framework - the Planning, Budgeting, and Performance Management process. Through this process, agency work (programs and activities) will be planned, managed, monitored, and assessed based on the relative contribution of the work to the achievement of our performance goals. Effectiveness reviews (e.g., doing the right work) will be conducted to determine what work needs to be added, maintained, reduced or shed in order to deliver the desired outcomes. Efficiency reviews of key processes (e.g., doing the work right) will be conducted to determine the most efficient means of delivering the desired outcomes.

- *We will use risk information to improve the effectiveness and efficiency of our activities and decisions.*

  As part of our agency-wide Probabilistic Risk Assessment Implementation Plan, we will conduct an integrated evaluation of risk information, inspection findings, operating experience, research results, and cost data to identify ways to improve the effectiveness of NRC regulatory requirements, guidance, and processes. We will improve our ability to conduct effective plant safety assessments by employing risk-informed methods and data which allows for early identification of changes in plant risk. We will develop the tools and information needed to support realistic (versus overly conservative) decision making. We will ensure that our regulatory focus is on those activities that pose the greatest risk to the public by using PRA techniques and other approaches for differentiating between high- and low-risk activities. To improve efficiency in our use of risk information in our activities and decisions, we will leverage our knowledge of risk information through participation in international cooperative research programs. We will improve predictability and stability in our use of risk assessment methods through participation in national standards activities. Likewise, we will develop guidance to ensure that the applications of risk assessment methods are suitable and that there is consistency in their use in our decision-making process.

- *We will continually improve and standardize NRC processes*.

  We will explore opportunities to centrally manage and prioritize work. We also will systematically review key business processes and will document, standardize, measure and track, and then analyze and improve the core processes that are critical to achieving our outcomes. We will seek opportunities for improvement and continue to apply lessons learned.

- *We will ensure that agency decisions are based on technically sound and realistic information.*

  Recognizing the maturity of the nuclear industry, we will focus resources in those areas where important gaps in information still exist, where uncertainties exist about the significance to risk, and where the degree of conservatism in safety margins has not been quantified. We will maintain tools and methods used for decision making which reflect recent scientific information and consider remaining uncertainties. We will ensure that our decisions on significant safety issues are supported by high quality expertise, experiments, data, tools, and methods.

- *We will anticipate future challenges posed by an ever-changing environment, including the introduction of new technologies and changing regulatory demands.*

  We will seek information about new technologies and will develop the knowledge and tools to evaluate the implications of these new technologies on the safety of nuclear reactors. For example, as digital instrumentation and control equipment and its related software are increasingly introduced into reactor designs, we will conduct research on potential safety issues to prepare us to make timely and realistic regulatory decisions. In addition, we will participate in international cooperative research programs and will exchange information with universities to leverage knowledge from others. Mindful of our respective roles, we will seek opportunities to interact with and where appropriate initiate cooperative programs with industry to minimize duplication. We will take these steps to ensure that our regulatory process does not impede use of new technology to improve safety, increase productivity, or reduce costs.

PERFORMANCE MEASURES:

To achieve the performance goal to make NRC activities and decisions more effective, efficient, and realistic, the NRC has established measures that directly, or through surrogate measures, indicate whether the NRC is achieving its performance goal. These measures establish how far and how fast the agency will move in the direction established by the performance goal and help to determine the need to evaluate and adjust programs and work to achieve the performance goal. The NRC believes these measures will provide reasonable assurance that the performance goal will be met.

PERFORMANCE GOAL MEASURES
TO MAKE NRC ACTIVITIES AND DECISIONS
MORE EFFECTIVE, EFFICIENT, AND REALISTIC

1. Complete 95 percent of milestones on time in Probabilistic Risk Assessment implementation plan to risk-inform Part 50.

2. Review at least 3 key processes each year to identify improvements which will increase timeliness of regulatory decisions and products. Reviews will begin in FY 2000. Candidate processes include: 1) licensing actions; 2) improved standard technical specification amendments; 3) rulemaking; 4) resolution of generic safety issues; 5) license transfers; and 6) exemption requests.

3 Complete 95% of milestones on time in the plan to resolve technical issues related to the licensing of the fabrication and use of mixed-oxide fuel in nuclear reactors.

4. A plan for risk-informing all reactor related activities is developed and implemented in FY 2000.

5. Complete major milestones in accordance with Commission-approved schedules to support completion of license renewal applications within 30 months from receipt of the application to a Commission decision.

The first and fourth measure are intended to measure our success in moving toward risk-informed regulation in a timely and integrated manner. The second measure is intended to measure our efforts to be more efficient and timely in the delivery of regulatory products. The third measure is intended to measure our readiness to license the use of new technologies. The fifth measure is intended to ensure that the current 30-36 month scheduled is accomplished; however, the NRC will continue to aggressively pursue opportunities to further reduce the 30-month goal.

ADDITIONAL SECTION TO BE DEVELOPED:

We will be developing an additional section on external factors for the Nuclear Reactor Safety chapter.

ADDITIONAL CHAPTERS TO BE DEVELOPED:

- Nuclear Materials Safety
- Nuclear Waste Safety
- International Nuclear Safety Support
- Agency Business Practices

APPENDIX

THE NRC'S SAFETY PHILOSOPHY

In the Atomic Energy Act of 1954, Congress authorized the civilian use of nuclear energy subject to regulation by the Commission. The principal terms of this regulatory mandate -- "protect health and safety," "assure the common defense and security," "minimize danger to life or property," and "provide adequate protection" -- are not defined in the Act, nor are they self-explanatory. Since 1954, therefore, the Commission has been engaged in a continuing process of interpreting and applying these terms in such a way as to give effect to the Congressional intent. This process has taken place with Congressional oversight as well as judicial review of specific NRC actions. The results has been the creation of a body of regulations, decisions, and practices through which the Commission's safety and safeguards philosophy is expressed. This philosophy comprises several closely interrelated elements: defense in depth, licensee responsibility, safety culture, regulation effectiveness, and accountability to the public.

DEFENSE IN DEPTH ensures that successive measures are incorporated into the design and operating procedures for nuclear installations to compensate for potential failures in protection of safety measures, wherever failures could lead to serious public health and safety or national security consequences. Protection and safety must be ensured by sound management and engineering, quality assurance, training and qualification of personnel, comprehensive assessments including the effect of human performance on safety and safeguards, attention to lessons learned from operating experience and research, and procedures for mitigating accidents and protecting the public should multiple system failures or malevolent activities nevertheless occur.

LICENSEE RESPONSIBILITY embodies the principle that, although the NRC is responsible for developing and enforcing the standards governing the use of nuclear installations and materials, it is the licensee who bears the primary responsibility for conducting those activities safely. The NRC's role is not to monitor all licensee activities but to oversee and audit them. This allows the agency to focus its inspection, licensing, and other activities on those areas where the need, and the likely safety and safeguards benefit, is greatest.

SAFETY CULTURE recognizes each licensee's responsibility to establish and maintain a set of attitudes that ensure safety issues get the attention they warrant. A safety culture encourages a questioning and learning attitude toward protection and safety and discourages complacency. It reflects an understanding that safety and protection are permanently the highest priority; that problems must be identified and addressed promptly and appropriately; that individuals at all levels must know their responsibilities and have suitable training; and that, within the organization, effective communication on protection and safety must be ensured.

REGULATORY EFFECTIVENESS emphasizes the approach that, because safety is paramount in the Commission's regulatory program, certain standards and practices to ensure adequate protection will be required, whatever the cost. Over and above that baseline, additional safety upgrades will be required only if their benefits justify the added cost. In implementing its program, moreover, the NRC is conscious of the need to foster efficiency, so that a given level of safety and safeguards can be achieved through the most cost-effective means. NRC's requirements and regulatory approaches must reflect state-of-the-art information, taking into account accumulated operating experience, technological developments, and progress in research.

ACCOUNTABILITY TO THE PUBLIC dictates that just as licensees are accountable to the NRC, so too is the NRC accountable to the American people and their elected representatives, the Congress. For the NRC, part of accountability entails being candid with the public about what it is doing and why, as well as acknowledging the public's interest in safety issues and its right to know. In addition, the NRC recognizes that the Atomic Energy Act ensures that the public has an important role to play as the agency addresses issues of safety and health. For members of the public to perform that role, they need sound, complete, and up-to-date information from NRC. A key element of the NRC's safety philosophy is that nuclear regulation is the public's business.

PRINCIPLES OF GOOD REGULATION

INDEPENDENT. Nothing but the highest possible standards of ethical performance and professionalism should influence regulation. However, independence does not imply isolation. All available facts and opinions must be sought openly from licensees and other interested members of the public. The many and possibly conflicting public interests involved must be considered. Final decisions must be based on objective, unbiased assessments of all information, and must be documented with reasons explicitly stated.

OPEN. Nuclear regulation is the public's business, and it must be transacted publicly and candidly. The public must be informed about and have the opportunity to participate in the regulatory processes as required by law. Open channels of communication must be maintained with Congress, other government agencies, licensees, and the public, as well as with the international nuclear community.

EFFICIENT. The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. The highest technical and managerial competence is required, and must be a constant agency goal. The NRC must establish means to evaluate and continually upgrade its regulatory capabilities. Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted. Regulatory decisions should be made without undue delay.

CLEAR. Regulations should be coherent, logical, and practical. There should be a clear nexus between regulations and agency goals and objectives whether explicitly stated. Agency positions should be readily understood and easily applied.

RELIABLE. Regulations should be based on the best available knowledge from research and operational experience. Systems interactions, technological uncertainties, and the diversity of licensees and regulatory activities must all be taken into account so that risks are maintained at an acceptably low level. Once established, regulation should be perceived to be reliable and not unjustifiably in a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to lend stability to the nuclear operational and planning processes.

NRC'S PLANNING, BUDGETING, AND PERFORMANCE MANAGEMENT PROCESS
PRINCIPAL COMPONENTS OF THE PROGRAM CHAPTERS OF THE STRATEGIC PLAN